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INSIDE

Led by Michelle Prettyman '79, the women's fencing team defeated the University of Connecticut over the weekend, 10-6, and looks forward to a journey to New York City at the beginning of next month to compete against three other schools.

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WEATHER

Partly Cloudy and cold tonight with lows in the low to middle thirties. For Wednesday, mostly cloudy skies with high temperatures again near 40. Slightly warmer Wednesday night with lows in the mid to upper thirties. Mostly cloudy again on Thursday with a chance of some light rain. Highs in the mid to upper forties. Chance of rain 30 percent today and Wednesday, 50 percent Thursday.

EXCERPTS

To the editor:

Barred windows, chained fences, locked gates and security guards...

I was denied entrance into my own cell because my I.D. had not yet been issued. The visitors I was allowed to have were threatened with arrest when caught escaping "unaccompanied" from my cell, which was perhaps 30 yards from the main door. Two demerits were filed against me, a third would've placed me before the honor board and a possible discharge.

Bread and water at Bartol Hall kept me alive. During those first four months my cellmate and I pulled each other through, but then she got lucky and escaped after serving her first term.

It was lonely at times until I met my new cellmates who scurried in every now and then to keep me company. Maintenance made an effort to exterminate them, but they too were trapped within the barred windows, chained fences, locked gates, and security guards...

S. Chin
Simmons Janus

THE TECH

The Tech is pleased to announce the appointment of Jay Glass '82 as Associate Sports Editor.



Noyes' work lauded by Pauling

By Aaron Rapoport

Dr. Linus Pauling, recipient of two Nobel Prizes (Chemistry in 1954, Peace in 1962) and currently President of the Linus Pauling Institute of Science and Medicine, delivered the Karl Taylor Compton Lecture on the occasion of the 75th anniversary of the Laboratory of Physical Chemistry. He addressed an over-capacity crowd in Room 26-100, Friday afternoon.

Pauling's lecture culminated a day-long schedule of lecture commemorating the founding of the Physical Chemistry Laboratory. In the morning, talks were given by Dr. John M. Deutch, Director of Energy Research (U.S. Department of Energy) and by Dr. Edward R. Kane, President of E. I. DuPont de Nemours and Company. The afternoon session, initiated by Dean Robert A. Alberty of the School of Science, began with a lecture by Dr. John Ross, Frederick G. Keyes Professor of Chemistry, on current trends in Physical Chemistry.

Following Ross, Alberty in-

troduced Dr. Linus Pauling, citing part of his educational background. Alberty, a student of Pauling's himself, said that Pauling received his undergraduate training at Oregon State College and earned his PhD. in chemistry at the California Institute of Technology. (Later Dr. Pauling indicated that he was only the seventh recipient of a PhD. degree from Caltech). Alberty pointed out that Dr. Pauling did not receive a high school diploma, but later received an honorary one. Dr. Pauling then ascended the lecturn and amid loud applause began his talk.

Pauling's lecture centered around the achievements of Arthur A. Noyes, founder of the Laboratory of Physical Chemistry and principal founder of the California Institute of Technology. In an anecdotal and often humorous talk, Pauling described his personal and professional relationship with Noyes, emphasizing Noyes' role in motivating Pauling to study the nature of chemical bonding and



Two-time Nobel prize winning chemist Dr. Linus Pauling delivers the annual Karl Taylor Compton Lecture, describing the life and work of fellow chemist Arthur A. Noyes.

research the use of x-ray technique in crystal structure — two areas in which Pauling has made significant advances.

Pauling also stressed the pre-eminence of the MIT Laboratory of Physical Chemistry by pointing out that most of the leading physical chemists of the past 75 years have been associated with the laboratory. He cited Gilbert

Lewis and Frederick Keyes as examples. Pauling concluded his lecture with a brief slide presentation of Noyes, his papers, and his awards.

Following the lecture, a large number of students asked Pauling to sign various chemistry texts. One student, however, requested that he initial her bottle of vitamin C.

MBTA modernizes subway

By Alan Wimmergren

The oldest subway system in North America — the Boston subway system — is currently receiving a major facelift and is being extended thanks to an infusion of several billion dollars from the Federal government.

According to the Massachusetts Bay Transportation Authority (MBTA), work is progressing in three areas: a station modernization program throughout the present system, construction of the Southwest Corridor Project from downtown Boston to Forest Hills which will replace the Washington Street elevated line; and the Red Line extension from Harvard Square to the Alewife Brook Parkway.

The Red Line project has drawn the most attention, primarily due to concern by residents along the route about the effects of construction equipment. Completion of the project, scheduled for January 1984, will improve communication between MIT and Tufts University: the proposed Davis Sq. station in Somerville is only a few blocks from the Tufts Campus.

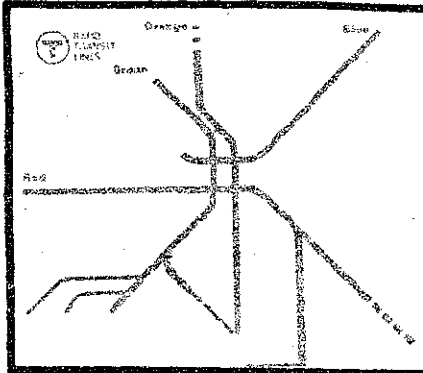
In the meantime, major changes hopefully will not disrupt Harvard Square during construction: engineers are carefully timing events to maintain vehicular and pedestrian traffic on the street, and present Red Line service underground, while an entirely new station is being built.

To achieve this, a temporary station at Eliot Street near Brattle Square is currently under construction; a second temporary station at Holyoke Street is also planned. Designers intend to make permanent improvements above ground, including wider sidewalks and a different automobile traffic pattern. Care is being taken to maintain access to merchants in the area.

The \$669 million Southwest Corridor Project is one of the largest of its kind in the nation ever, affecting Amtrak, commuter rail, and the Orange Line. The first effect likely to be noticed by

the MIT community will be the closing of the Back Bay railroad station next summer. The present historic but inadequate structure will be replaced by a new station designed to become a major transportation center serving Amtrak, suburban trains, and the Orange Line starting in 1983. Until then, Amtrak and commuter trains to the south will serve only South Station.

The project is part of Amtrak's \$1.6 billion Northeast Corridor Rehabilitation Project, which includes, by 1981, 120 mile-per-hour operation between Boston and Washington, DC and eventual electrification of lines from Boston to New Haven, Conn., enabling travelers to reach New



York in three hours and twenty minutes.

The Orange Line relocation along the corridor will include a station at Massachusetts Avenue, two blocks south of Symphony Hall, connecting with the Number 1 bus on Mass Ave.

Construction is presently underway adjacent to the Mass Pike between Back Bay Station and Washington Street.

The station modernization program, first conceived in 1965 and still underway, has made a significant impact on many of the worst stations in the system, according to John Williams and Joe Brown of the MBTA. Visible improvements have been made with respect to lighting, color-coding and other graphics, station identification such as by photomurals, ventilation, and new cars on the Red and Green Lines. Future plans include platform lengthening on the Red Line to allow six car trains, and new cars for the Blue Line.

Walters reminisces on career

By Bruce Kaplan

Last Wednesday night, Emmy winner Barbara Walters addressed the Harvard Law School Forum and the Harvard Business School Women's Student Association at Harvard Law School.

Walters, who is famous for her interviews with distinguished personalities, recounted that while in college she had no idea what her profession would be. Beginning with what she expected would be only a temporary position as a writer, she advanced to her present status as one of television's pre-eminent personalities.

Walters is most proud of her interview with Israel's Prime Minister Menachem Begin and Egypt's President Anwar Sadat during their historic meeting in November of last year. Recalling the events preceding the interview, she spoke of a trying and hectic schedule. Having completed a late night interview with Moshe Dayan, she spent the rest of that evening trying to make arrangements to be on the plane that would take President Sadat to Israel the next day. This proved to be difficult, for at that time there were no direct telephone lines from Israel to Egypt. Thus,

all calls had to be routed through the United States.

Later, after completing all the arrangements, she was euphoric that she would be on "the very first civilian flight from Israel to Egypt since 1947." Walters was among a group of correspondents who awaited an historic comment upon President Sadat's arrival. Instead Sadat remarked, "So, Barbara, you made the plane." then turning to Walter Cronkite, he said, "Walter, Walter, what do you think about Barbara being here?"

While on the flight she arranged an exclusive interview with Sadat. This meant that Sadat would consent to do an interview without Begin's presence.

That night in Jerusalem, after all the ceremonies that had taken place during the day, Walters had an interview with Begin at his home. Just before she left, Begin casually mentioned that he had persuaded Sadat to consent to a joint interview with "our dear friend Barbara." Shocked, she responded, "Mr. Prime Minister, you're the best agent I've got." Walters referred to both men as "having a sense of mission."

While the Sadat-Begin inter-

view was the biggest feather in her cap, her favorite interview was with Fidel Castro. "He is a hard man not to like."

"He is a moral man, and he is a communist revolutionary," she continued, and despite his image, "one of the least macho men" she had ever met. Castro "wants to be a neighbor," but not to change his policies. Ms. Walters' overall impression of Castro was embodied in her statement: "I think what he's doing is right for his people."

During the remainder of the forum, Walters responded to various questions about her feelings towards television news and her relationship to that medium. She feels that the criticisms of TV news are basically unfair, saying that "most newspapers are not as good as a half hour of network news." Besides, "people get what they really want to see." While she does not object to children watching any sort of television, her advice is "don't plunk a child in front of (TV) news and documentaries without a parent."

Regarding her multimillion dollar contract, Ms. Walters stated that at first "the money (Please turn to page 3)

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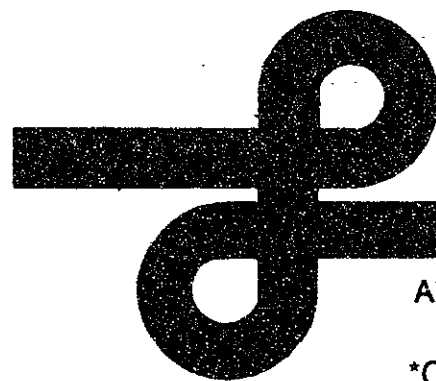
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Rodman ignores smoking facts

By Gordon Hunter

The "attitudes and actions" of the MIT Medical Department Director show that "he approves of smoking," according to Gary Schultz, a staff member in the Laboratory for Nuclear Science, a charge which Medical Director Melvin Rodman "could not disagree with more."

Both Schultz and Rodman agree that many members of the Medical Department, including Rodman, smoke. Rodman insists that these people have a right to smoke in their own offices. However, Schultz doesn't agree that this is acceptable.

Schultz maintains that "people have the right to smoke around consenting adults in their own environments." The right does not extend to doctors within their offices or nurses and secretaries within their lounges, as these locations are not just their own environments but that of others as well. He added that "anyone who wants to work in health related fields should be prepared to give up smoking while on duty."

Rodman, on the other hand,

claims that "no one in any field should offend any else, while on duty," but that "on duty" meant only when dealing directly with customers or patients. "This is a no smoking office," stated Rodman. "the staff does not smoke in front of patients, except when the patient lights up" or when consent is given. He added that "there may be an infrequent exception to this rule but that is because this department has no policeman."

Schultz pointed out that smoke can spread under doors, through walls and between windows, and that the smell can linger in a room or on clothing. He also said that there are many people who are sensitive to this smoke, especially in a medical environment. Thus, he concluded, a doctor shouldn't smoke in his office.

Rodman says that the staff is hired by their qualifications, not by whether or not they smoke. He "expects them to act with a sense of responsibility" which he calls "professionalism." This means that he expects them to try not to offend anyone and not to smoke in front of patients "because it is discourteous." However, he says that he can't expect to "prevent these professionals from smoking inside their private offices."

As for his own smoking,

Rodman claimed that his "own behavior is irrelevant." "I am not smoking as an exemplar," he said. "I try not to smoke in situations where I would be taken as such." He added that "I don't want to play games either: posing as a non-smoker while sneaking a smoke in some closet."

Rodman pointed out that he doesn't take his own advice on other matters besides smoking, saying he has often worked long hours and doesn't get enough sleep. He said that there is a difference between "public concern and a private individual." He has tried to quit several times, but "it's tough to quit." "I don't know why I smoke," he continues, "except maybe I'm convinced I'm immortal, just as I often accuse others of believing."

Rodman says he does not believe that this policy makes his own efforts or those of the Medical Department any less effective. The department has run a number of health education programs in recent years and Rodman himself is in a number of anti-smoking associations. Rodman states "we are firmly convinced that smoking is literally evil." He adds that "my judgement would be that we are doing a good job" in informing people about the dangers of smoking.

Walters talks on Mideast

(Continued from page 1)

hurt." The feeling was that "people in the news are not supposed to get that sort of money." Yet, "No one complains that Carson gets five million a year for working four days a week, with sixteen weeks off." She said that she "deplored" the fact that Henry Kissinger and Gerald Ford were being paid to "give" interviews. Overall, her suggestion was "Don't kill the messenger if you

don't like the message."

Although she has never seen Saturday Night Live, Ms. Walters said that she had heard about it and was "hurt and embarrassed" by the Baba Wawa routine. Some time after the original spoofs, she met Gilda Radner at a party and persuaded her to perform. Walters was amazed, "not by the way she spoke," but by her mannerisms: "she even sat the way I did."

news roundup

World

Congressman killed in Guyana, mass suicide follows — Representative Leo Ryan (D-Calif.) and four members of his party were shot Sunday afternoon after visiting the headquarters of a California-based religious cult, the People's Temple, in Guyana. According to the US State Department, the bodies of 400 of the cultists, who apparently committed mass suicide, have been discovered by Guyanese troops sent to rescue the rest of the Congressman's party. Survivors told the troops that the cult's leader, the Reverend Jim Jones, had ordered his 1200 followers to drink poison as part of a last communion. So far Jones and the other 800 cultists have not been found. Ryan visited Guyana in response to pleas by the relatives of cult members who claimed that Jones was using mental and sexual intimidation to keep his followers. Ten members of his party are still missing and are presumed to be hiding in the jungle.

Iranians released — As part of the effort to quiet opposition to his rule, Iranian Shah Mohammed Riza Pahlavi set free 210 political prisoners. During a speech to his Parliament and Cabinet the Shah repeated his promise to hold free elections next June, which would end the military government he has installed in response to widespread rioting against his regime.

Mao linked to "Gang of Four" — For the first time former Chinese Communist Party Chairman Mao Tse-tung has been accused of aiding the four radical party leaders known as the "Gang of Four," including his wife Chiang Ching. This announcement in China was part of a continuing movement against the four extremists and their followers by reactionary groups, which began with rioting in Peking and internal power struggles resulting in the disgrace of the "Gang of Four."

Middle East

Proposed Egyptian timetable rejected by Begin — Israeli Prime Minister Menachem Begin has recommended to his Cabinet that it veto a proposed Egyptian time table that would in effect link the Israeli-Egyptian peace treaty to the solving of the Palestinian problem. He did ask, however, that they approve of a treaty preamble which includes a more loosely defined link to the Palestinian problem. The Cabinet will not announce its decision until next Tuesday. Begin's limousine was showered with eggs on his way to the Cabinet meeting, by demonstrators calling for his resignation.

—Jordana Hollander

notes

* The second lecture in the original and important lecture series "Technology and Work: Who Decides?" will be held next Mon., Nov. 27, at 4pm in room 9-150. The speaker is David Montgomery, who was for some time a machinist and member of the United Electrical Workers. He is now a labor historian, and teaches at the University of Pittsburgh. One of his main interests, and the topic of his lecture, is Workers' Control of Production.

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opinion

Press leads science onto intern't stage

By Bob Wasserman

Science and Technology have moved out of the laboratory and have suddenly become a driving force behind American foreign policy. The leader behind this drive is Dr. Frank Press, President Jimmy Carter's science advisor and the head of the new US Office of Science and Technology Policy.

The Soviet Union puts technological exchange as one of the primary concerns in the proposed US-USSR SALT II pact, and the Russians especially want Press to go ahead with a planned trip to Moscow which would coordinate scientific exchanges between the two countries. And part of the new openness of the People's Republic of China to western technology has been the result of Press' travels and planning of a scientific exchange between China and the US which recently got underway.

Press, formerly head of MIT's Earth and Planetary Science Department, has been involved in international scientific affairs throughout his career. In 1957 he helped organize the International Geophysical year, a worldwide scientific investigation of weather and earthquake detection. Press was Chairman of the National Academy of Science Committee on Scholarly Communications with China while still at MIT. In 1974, Press led a delegation of US scientists on a tour of Chinese earthquake detection systems, and this early mission helped lay the groundwork for subsequent scientific diplomacy, including a trip by Press to China this fall.

While US-China relations within the scientific community have been warming up due in part to China's denouncement of its Cultural Revolution, which had closed the country to Western science for the past decade, feelings between Americans and Russians have cooled considerably. This summer's trial of Soviet dissident Anatoly Shchirsky, a Jewish computer scientist, immediately drew protests from US scientists. Scientific exchanges between Soviet and American scientists, which some critics claim benefit only the Russians anyway, were cancelled, and sales of US petroleum drilling equipment to the USSR were halted.

The involvement of the international scientific community in world affairs has increased greatly in the 1970's. International conferences, scientific exchanges, and a greater circulation of foreign research journals have brought the world's scientists closer — both ethically and ideologically. These people form only part of their countries' societies, of course, but increased interaction between scientists of different nations makes the researchers less antagonistic and more apt to speak up for injustices all over the world.

Press' emphasis as science advisor also marks a profound change in US policy. This post was established in the 1950's as a response to the Soviet's Sputnik success, and the main responsibility of science advisors such as James Killian and Jerome Wiesner were to gear up the American space program and beat the Russians to the moon. Under Carter, Press has focused on broader areas such as the biosciences, and the development of natural resources, as well as becoming greatly involved in international affairs.

In the past, American scientific policy has only reacted to foreign events, as in the case of Sputnik. But in the future, due to the increased awareness of the American scientific community and the global-mindedness of Dr. Press, US science policy will set the agenda for many international happenings.

something else



Tangled in MIT bureaucracy

By Robert D. Bernstein

I have just returned from a year away at the University of California at Berkeley, a school whose vast bureaucracy is infamous. My experiences with their administration were many, varied and always horrible. The essence of the problem seemed to be that the administration thought that they not only managed the school, but that they really were in charge.

While this was not my only reason, it was an important reason for me to return to MIT, where I had the feeling that the administration knew its place. Well, apparently things have changed, if in fact they were ever better. Since I have returned, I have had an almost steady stream of conflicts with different administrative "servants."

When I returned in mid-August to look for housing, I found myself up against the worst housing shortage in this area's history. I had the gruelling experience of searching all day, every day, until classes started and found that there simply was no housing to be had in the greater Boston area.

There are many details of the administrative screw in housing, but I will mention just one. Through the graciousness of certain individuals, I was allowed to sleep in a large closet off of an office. After about three weeks there with no sign of any other housing prospects, I went to the Dean for Student Affairs office to see if I could stay where I was until I did find housing — offering to pay rent if necessary — without it being illegal. Absolutely not, was the reply. "It would have to be an official living group..." etc. I had a few words in reply to all this, remembering how this person had been somewhat less than helpful every time I had seen her — going back to my freshman year — always being rather rude and doing positively negative (!)

things like refusing to put me on the list of people eligible for fraternity rush, a possible housing alternative.

I must take a break to explain that I am not griping. I see a serious general trend of the administration taking itself too seriously, which goes far beyond a series of many isolated unpleasant events. I will try to make this clearer, but first I will give some more examples.

The Office of Financial Aid. While at Berkeley, I wrote that I

perspectives

was interested in returning to MIT, but that with no financial aid I would be unable to attend MIT. At the time it seemed absolutely true. They in so many words said Cal Berkeley is a fine place — we hope you like it. Then, it looked like I could afford it, so I transferred. Soon after, my family hit a financial crisis — almost no money coming in and very little in reserve. The office's response: when we run out completely, try again. As in perhaps all the examples I will give, the administration shows that it simply does not care. In other words, they are not doing their jobs as administrators or as human beings.

The payroll office. This term, like every time I have worked at MIT, a mistake has been made and taxes were taken out. Unlike every time in the past, however, this year they refused to give me a refund.

The admissions office. Actually the housing problem again. Bob Wasserman's article on housing was full of deep insight into the problem, and the administration's response consisted of finding possible errors in his data. The admissions office planned to accept more people than there was room for; it was not that there were so many more people than they ex-

pected. And, while it is nice that more people can take advantage of MIT this way, MIT's motivation was in fact to get more money. They figured they could afford to lose a few students who couldn't tolerate living in essentially uninhabitable situations. I consider one room with three or more people in it, no matter how large, essentially uninhabitable — particularly for \$140 to \$160 a month that MIT is getting for a room. (The reasons for this kind of rent may be worth an investigation all by itself, considering that rents for comparable real world rooms when available are \$90 to \$130 a month).

The medical department. I have already wasted hours of my time arguing with various administrators to get back money which doesn't belong to them. They claim I never filed a waiver form for their insurance and so, even though I paid for everything except the insurance, they assumed I wanted insurance. In fact what happened was I followed their instructions and waited for them to send the waiver form, assuming that for all the thousands of dollars we pay them to send out bills (to get thousands of dollars to pay themselves) they could do this correctly.

This latter case introduces another point, which also came up at the payroll office. MIT will reduce a student's debt — even though in fact he has no debt at all — to "only" ten or twenty dollars and try to make the student feel foolish about arguing about such an amount "especially when this amount is compared to the thousands of dollars paid already." It is exactly because we are paying thousands of dollars already that MIT should be the one to take any "piddling losses."

The list of examples could go on *ad nauseum*, and perhaps should include such things as the recent decisions on grading, but these would probably obscure (Please turn to page 5)

The Tech

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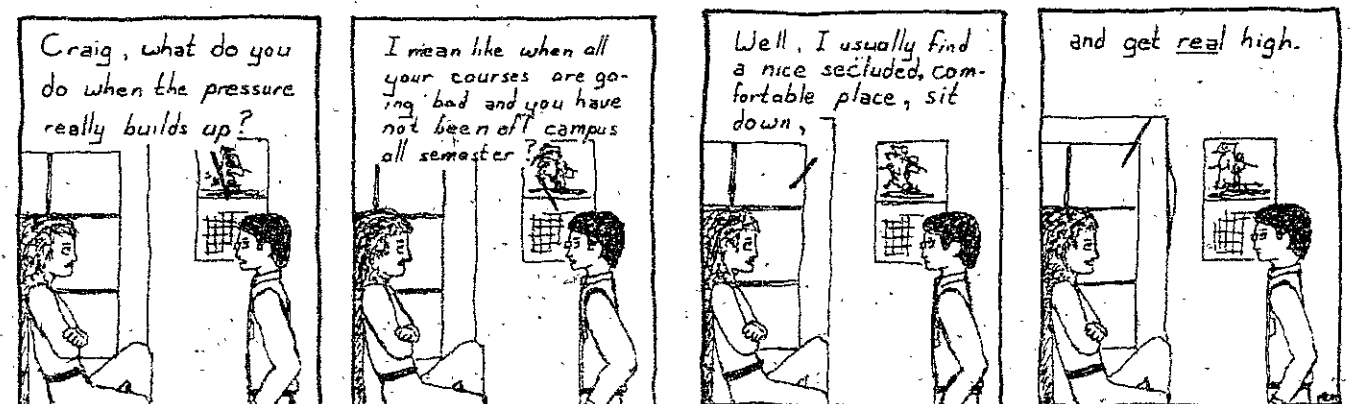
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Paul Hubbard

by Kent C. Massey



Opinion cont.

Nestle's puts crunch on developing world

By Kenneth Burke

In the past few years, the Nestle Co., Abbot, Bristol-Meyers, and other large multinational companies that produce infant formulas have begun to market these products to mothers in Third World nations. In radio advertisements and on billboards they promote the use of artificial formulas as the modern way to feed babies. They arrange for nurses to distribute free samples in clinics and hospitals, giving mothers the impression that medical authority encourages bottle feeding.

This campaign has succeeded: many mothers who would otherwise have breast-fed their infants have chosen to bottle-feed instead. One result has been that the use of these modern, up-to-date techniques has helped to increase the number of infant deaths from infection and malnutrition in the developing nations. One specialist in pediatric nutrition, Dr. Derrick B. Jelliffe, has estimated that the formula companies' promotion of bottle feeding as a replacement

feeding in the developing nations has caused 10 million cases of severe infant malnutrition and infection each year.

It may seem strange to Americans to think that the familiar baby bottle could have such disastrous effects. After all, it has worked well here and in other advanced nations for many years. Why shouldn't it work just as well in a poor country? There are several reasons.

First, artificial formulas are inherently inferior to breast milk. Breast milk contains antibodies to several disease-causing organisms. The passive immunity conferred by these antibodies can be an important protection for an infant, especially in a developing country where often sanitation is poor and water supplies contaminated. Although commercial formulas provide the nutrients that a baby needs, they have none of the antibodies present in breast milk and do not give any direct protection against infection.

Another important problem with bottle feeding in poor areas is the fact that the formula is so

expensive and families so poor that mothers are often forced to overdilute the formula to stretch it until they can afford to buy more. Since a mother who bottle-feeds even just part of the time gradually stops producing milk, the baby often ends up not getting enough food. A malnourished infant does not grow properly. Malnutrition retards a child's physical and mental growth, irreversibly in severe cases.

The use of formulas can also make a child more susceptible to infectious diseases. Instead of receiving sterile breast milk, the baby drinks formula that has been prepared by mixing a concentrate with water that may be contaminated by microorganisms.

Many families can afford neither the equipment nor the fuel necessary to properly sterilize formula and bottles, nor can poor families afford refrigerators in which to store opened cans. Once the formula becomes contaminated, bacteria multiply rapidly in it. Even families who do have the resources to properly handle formula will not know how to do it if illiteracy prevents them from reading the directions. Often the directions are printed in a foreign language.

Malnutrition and infection in infants are the two halves of a vicious cycle. Malnutrition weakens a child's resistance to disease. Infection increases a baby's nutritional needs and interferes with the absorption of the nutrients that (s)he does get, worsening the malnutrition. A child can be trapped in this cycle, getting sicker and sicker until (s)he dies. Bottle feeding in places where poverty is widespread and



sanitation is inadequate exacerbates both halves of the cycle, poverty causing babies not to get enough food, contamination and lack of refrigeration making them sick.

In spite of the harm they are causing to children, the formula companies have continued to promote their products in Third World nations. It is possible to challenge the practices of the American formula manufacturers through stockholder resolutions, but the Swiss-based Nestle company, the world's largest producer of formula, is not susceptible to such tactics because its stock is unavailable to American investors. Nestle does, however, sell millions of dollars worth of consumer products here: the United States is its largest market outside of Europe. The Infant Formula Action Coalition (INFAC) is therefore organizing a nation-wide boycott of Nestle products, in order to put pressure on Nestle to stop promoting bottle-feeding in developing nations. Before we are willing to call off the boycott, we demand that Nestle (1) stop direct advertising of infant formula to consumers in developing nations, (2) stop dis-

tributing free samples to hospitals and new mothers, (3) stop using milk nurses to encourage bottle-feeding, (4) stop promoting infant formula to the health professions and institutions. We ask members of the MIT community to support the boycott by refusing to buy these products made by Nestle and its subsidiaries:

Nestle Crunch, Quik, and Toll House Morsels
Nescafe, Nestea, Decaf, Taster's Choice, Souptime, Sunrise Libby's canned goods
Stouffer products and restaurants
Crosse and Blackwell
Deer Park Mountain Spring Water
Wispride
Jarlsburg Cheese
Swiss Knight Cheese
Kavli Crispbread
Maggi
Keiller

So far, Nestle has shown little sensitivity to the sickness and malnutrition its promotion of infant formula has helped to cause. It now appears that the economic pressure of a boycott is the only way to stop Nestle from continuing to encourage unsound feeding practices.

A red-tape wrap-up

(Continued from page 4)

rather than further clarify the point. The point is that I see the administration dictating policy rather than serving the needs of the students and faculty. The students and faculty are what the school is all about, and they have certain needs like supplies, money and buildings in which to work, study, and live. The latter is taken care of by physical plant and the first two are taken care of by administrators. Administrators have no more or less authority than the

people who sweep the floors of our buildings. All are human beings who deserve respect and in my opinion should receive the same pay as each other and as all other human beings.

If the administrators are not satisfied with their position as servants rather than as controllers, the solution is not to make them happier by giving them more control. It is instead to find them a position in the world in which they would be happy. This is to their benefit and ours.

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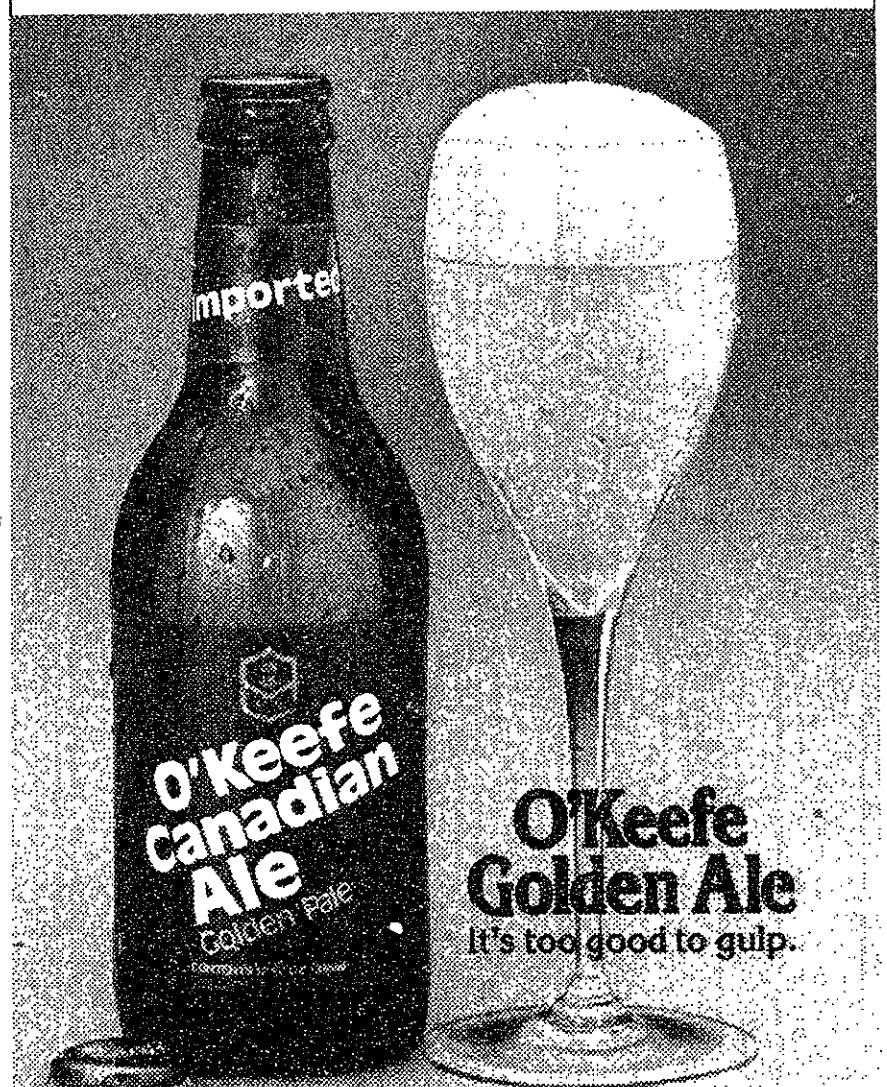
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A short course in Bonded Bourbon.

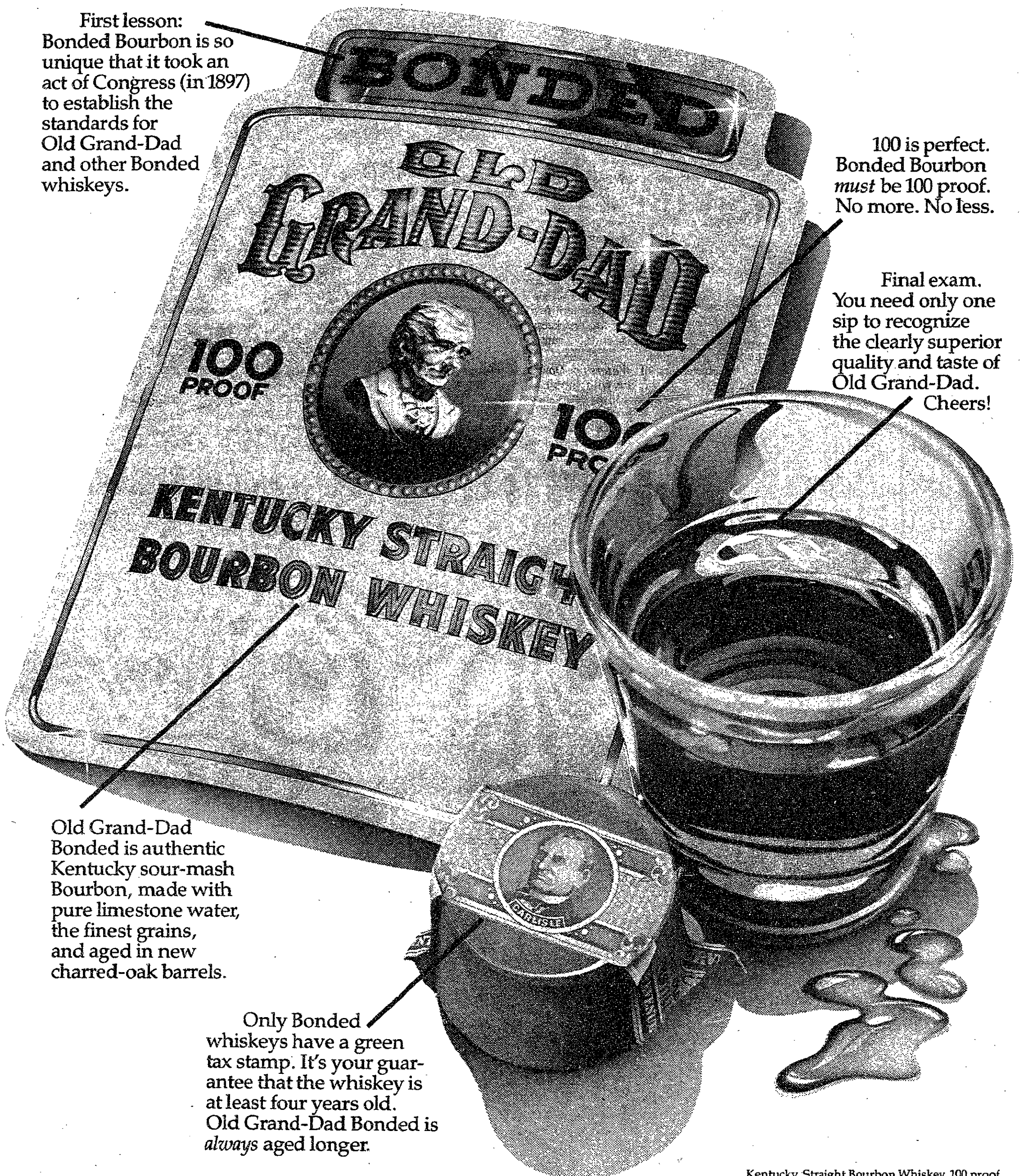
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Lord of the Rings: your favorite hobbits...



Frodo Baggins at the Great Council in Rivendell.

Lord of the Rings, a United Artists release; animated and directed by Ralph Bakshi, produced by Saul Zaentz; screenplay by Chris Conkling and Peter S. Beagle; now playing at the Sack Cheri.

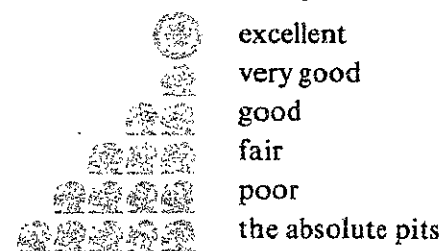
By David Solo

The *Lord of the Rings* is considered to be one of the major literary works of the twentieth century. In this film, Tolkien's trilogy is combined with the efforts of America's foremost talent in animation, Ralph Bakshi. Bakshi, whose earlier works include *Fritz the Cat*, *Heavy Traffic*, and *Wizards*, has introduced new techniques in *Lord of the Rings* that make it an awesome spectacle. Representing what is probably the state of the art in animation, this film allows you to forget it is animated.

As Bakshi himself admits, it is a film designed for those who have read Tolkien and who are familiar with the Middle Earth legend. *Lord of the Rings* is a story of the conflict between good and evil. It details the travails of Frodo, a hobbit, as he and the fellowship (a party consisting of elves, men, dwarves, hobbits, and a wizard) struggle across Middle Earth to destroy the ring of power that threatens to end everything and everyone good. The basic conflict is thus set and this film covers the first half of the epic description of their journey.

Part of the magic of Tolkien's prose that enraptured so many readers was his creation of a consistent, enchanting, complete world. Bakshi's film depends on the viewer having acquired much of this background before seeing the film. After an initial 15-minute exposition on the history of the Rings, the film takes off at a rapid pace. As a result of trying to put too much material into 131 minutes of film, the continuity is lost. Characters seem to be thrust inexplicably from one place to another, many scenes are simplified, glossed over or omitted, and explanations are never given. The result is a film that is enjoyable for one who is familiar with the book, but confusing to one who is not.

The Tech's movie rating scale:



The most important part of the film is the characters. Unlike the Rankin-Bass *Hobbit* that appeared on television last year, Bakshi has attempted to remain faithful to Tolkien's descriptions. The hobbits, Frodo (the ringbearer), Bilbo, Sam, Merry, and Pippin, are the small yet adult-looking characters that readers encountered in Tolkien's work. Complete with hairy toes, they act as one has come to expect, dedicated to enjoyment, but still brave and loyal.

The other races in the party are also well represented. Aragorn and Boromir, the two vastly different humans, are portrayed accurately. Boromir is the great warrior, full of bravura and self-interest. Aragorn, the ranger, is more complex a character and never fully revealed. Gimli the dwarf and Legolas the elf are clearly presented as outstanding members of their respective races. Filling out the party is Gandalf, the powerful wizard who leads them through

(Please turn to page 8)

and Watership Down's rabbits

Watership Down, an Avco Embassy release; Produced, written, and directed by Martin Rosen; now playing at the Sack Charles.

By Shawn Wilson

Watership Down is an adventure fantasy that appeared as a bestselling novel by Richard Adams several years ago, relating a quest of near epic proportions and involving mythology, psionics, culture shock, totalitarianism, and of course, a certain amount of violence. The story seemed destined for translation to the screen — and raised an uncommon problem for the producer, Martin Rosen: how to keep the characters from seeming cuddly, cute, and adorable.

The characters of *Watership Down*, as you probably know, are wild rabbits.

Rosen's production company, Nepenthe Productions Ltd. of England, has solved the problem admirably. The animators use realistic browns and grays for the colors of the rabbits, and by drawing them to look more like rabbits, rather than rabbit people, as the Disney studios might have done, it becomes easier for one to forget the



images of Flossie, Mopsie, Cottontail, and Peter.

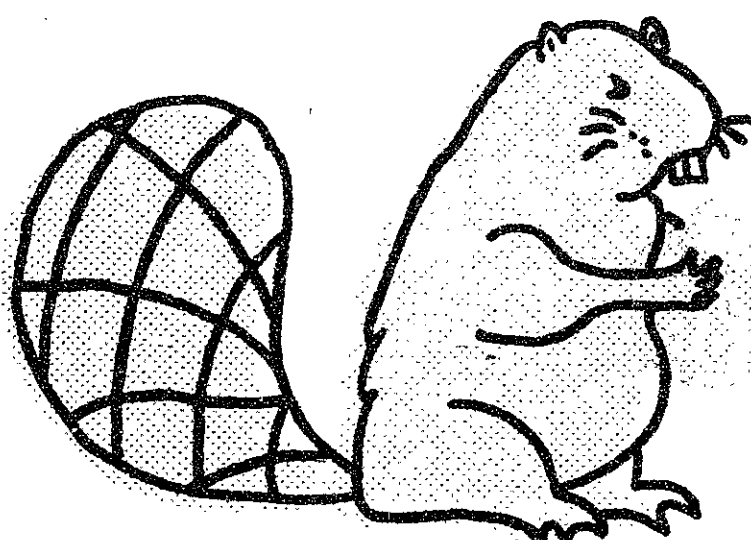
The film opens with a cartoony version of the rabbits' creation myth, and proceeds to tell the story of Hazel (voice by British actor John Hurt), whose clairvoyant brother Fiver (Richard Briers) foretells the destruction of their warren, somewhere in rural England. While Fiver's claims go unheeded by the warren's chief, gossip does spread quickly (even among rabbits), and the pair soon has a following ready to search for a new home. They evade the Owsla — the police ruling class — with the aid of one of its defecting officers, and set out to find what Fiver feels would be the perfect place for a warren.

Even in their own world, these are no ordinary rabbits. The creation story of Elahrairah preaches a justifiably paranoid outlook on life, but the renegades refuse to die; when they encounter a group whose outlook is downright fatalistic, again justifiably, they refuse to have anything to do with them, and continue under Hazel's leadership and Fiver's rather vague naviga-

tion. The survival theme is clear enough: the rabbits are set upon by rats, hawks, dogs, cats, men (of course), and other rabbits (!) — specifically General Woundwort, the dictator of the overcrowded warren Efrafa. After our heroes establish a home on the hill called Watership Down, they decide to increase their number by helping some Efrafans to escape, with the aid of a crazy seagull named Kehaar, who flies scouting and reconnaissance.

The drawings are very good, but the animation is a bit uneven at times, especially around the mouths — yet the characterizations are brought out surprisingly well by the voices, particularly the late Zero Mostel as Kehaar. The script, written by producer Rosen, does have to exclude parts of the six-hundred page book — all but one of the myths, for example, and most of the rabbit language Lapine — but being a fan of the book himself, Rosen was faithful enough to the story to make the film, like the book, an enchanting and thoroughly disarming fairy tale for adults.

The deadline date for submission of resumes for the **M.I.T. Science and Engineering Resume Book**, 1979, has been extended to November 21st. All interested students should bring resumes to the Career Planning and Placement Office, Room 10-170. Please note U.S. citizenship or permanent resident visa is required.



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Lord of the Rings for Tolkien aficionados



The Nine Companions and Gollum from *The Lord of the Rings*.

(Continued from page 7)

the quest, disappearing and reappearing at will.

The creatures encountered, orcs, a balrog, the ring-wraiths, Treebeard the ent, and several others, are treated in ways to accent their individual traits. The orcs are dark and indistinct while Treebeard is portrayed almost in the style of an old Saturday morning cartoon. In general, the forces of good are portrayed in detail and well illuminated while evil is dark and obscure. Some of the things and people met in the course of the movie are disappointing. The Lady Galadriel was not well depicted nor was Grima/Wormtongue, aide to Theoden, King of Rohan.

Smeagol, or Gollum, is the one character with the greatest ambiguity. Never fully described by Tolkien, his appearance is open to speculation. Bakshi's drawing of him is reasonable and depicts him somewhere between the more obvious forces of good and evil. Played for comic relief in parts of this segment of *Lord of the Rings*, he seems somewhat out of character, not quite in place in this film. Nevertheless, Gollum does evoke the sympathy from the audience that he does from the characters.

The backgrounds were also inconsistent. While excellent for the majority of the film, they suffer in many places. Rivendell and Lothlorien, centers of beauty, do not convey the majesty Tolkien ascribes to them. However, for most of the film, the work is so real that it contributes to the suspension of disbelief that surprisingly pervades the movie.

The music is the weakest part of the film. One or two segments are interesting, but Leonard Rosenman, whose credits include Academy Awards for *Barry Lyndon* and *Bound for Glory*, has failed to capture the atmosphere of Middle Earth. Tolkien made his world a land rich with song, but this is a component absent from the film version of *Lord of the Rings*.

The screenplay by Chris Conkling and Peter S. Beagle made several sacrifices to demands on time. They made very few outright changes in the plot, but used simplifications, additions, and omissions inappropriate for a film designed for those familiar with the original. The segment with Tom Bombadil and the barrows was missing as were the scenes that detailed the fellowship's journey between Rivendell and Moria.

Bakshi's techniques in animation make this a technically exciting movie. Filming *Lord of the Rings* live and then having a group of 200 animators draw the more than 10,000 backgrounds (less than 1000 is common), all under the close scrutiny and



The wizard Gandalf, one of the Nine Companions.

direction of Bakshi, and cells with more simultaneous on-screen action and reality than any previous film is only one of the innovations Bakshi employed in this film. The battle of Helm's Deep was not only the climax of the first part of this two-part film, but of the animation techniques as well.

The problems encountered while filming *Lord of the Rings* which are visible in the final product, serve to explain why this classic has remained unfilmed for so long. After holding the rights for ten years, Disney gave them to United Artists in 1968. Unsuccessful attempts by Stanley Kubrick and John Boorman left the film to Bakshi who finally created a product attempting to do justice to Tolkien.

When the film ends after the climactic battle at Helm's Deep with the message, "Here concludes the first part of the history of the War of the Ring," one is simultaneously disappointed and happy, leaving the theatre with a certain joy after having been transported to the world of Middle Earth, if only for two hours.

VLW begins fall lecture series

By Claudia Perry

The Visible Language Workshop has reaffirmed their commitment to communications by presenting a fall lecture series discussing various aspects of the media. The series opened with Topper Carew, program manager for multicultural affairs at WGBH. It continued last Friday with Tom Piper, director of the Office of Telecommunications Projects for the Laboratory of Architecture and Planning.

Both Carew and Piper stressed the need for community involvement in television. Piper showed his tape, *Copley Square*, an illuminating look at the community review process that went into the Copley Square development project. By showing the tape at community meetings, Piper was able to make people aware of the role they could play in shaping a project to meet their community's needs.

Topper Carew's community involvement takes a different tack than Piper's. His Rainbow Television Workshop, a South-End based organization, is the first independent Black production company in the country. At this time, the Workshop has completed two projects. The first is the story of a multi-generational Black family; the second a situation comedy entitled "Righteous Apples." Norman Lear's Tandem Productions are the creative and technical consultants on the projects.

One reason that Carew was able to produce these programs is his use of a cost-effective dramatic video technique. Learning his trade in Los Angeles and at the BBC, and as producer-creator of PBS's award-winning series, *Rebop*, he has attained a little-doubted status as a leader in community television. At Rainbow, work is being provided for people involved in all phases of dramatic television production in the Boston area.

Although Piper's video work has been confined to MIT for the most part, he sees the need for opening up decision-making processes to the community. He is particularly interested in two-way cable access as a method of making review processes more meaningful to the average viewer.

One example of Piper's current work can be seen on WGBH's *Ten O'Clock News*. A three-part series on solid waste management on the North Shore, its second part can be viewed tonight.

The series takes the point of view of the citizens of the North Shore on solid-waste management. Produced by Piper with Charlie Bennett, the project grew out of an environmental impact assessment project conducted by MIT's Urban Studies department.

Though both Piper and Carew are video visionaries, the entire Visible Language Workshop lecture series is not devoted to

television. The next talk features Dietmar Winkler of Southern Methodist University performing arts faculty. Soon to follow are Lynn Staley and Ron Campisi of the *Real Paper* and *Boston Globe* respectively.

With Russel Peters of the Mashpee Indians, the focus will shift back to television and the community. Finishing out the series will be Tomas Rivera, director of the South End Telecommunications Demo Project, and Antonio Muntadas, CAVS fellow. For further information on times and dates, contact the Visible Language Workshop (x3-4416).



A scene from last weekend's Dramashop production of Aristophanes' *The Frogs*. Left to right are Bob Schaffer as Dionysus, Jim Murray as Xanthias, and Stu Stothoff as Aikos. (Photo courtesy of C. amashop)

arts cont.

John Oliver: the Devil made him do it

By Joel West

Modern technology has brought a revolutionary change to the face of classical music. Due to the pervasive influence of recorded music, we have come to expect perfection: on a recording, weak or inarticulate vocalists can be miked individually, mistakes can be exorcised with the stroke of a razor blade.

The MIT Choral Society's performance of *The Spectre's Bride* was by no means perfect; but most of its faults were those that could be easily removed by a clever recording engineer. Had the performance been given 50 years ago (hopefully in a better hall than Kresge!) it would have met with even more thunderous applause than greeted it Sunday.

Antonin Dvořák wrote *The Spectre's Bride* in 1884, the English version debuted in 1885 at the Birmingham Music Festival. The work directly evolved from the oratorios of Mendelssohn, Handel, and Bach; in fact, it shared the program at Birmingham with *Elijah* and the *Messiah*. The "Dramatic Cantata to a Poem," as it is described, was quite popular around the turn of the century, but has fallen into disfavor, unjustly so in light of Sunday's performance.



John Oliver waves his sceptre in last Sunday's performance of *The Spectre's Bride*. (Photo by Joel West)

As usual, conductor John Oliver and his perennial concertmaster Maynard Goldman assembled a first-rate if anonymous orchestra; the players are the best thing this side of Symphony Hall, if not simply the best.

The symphonic Dvořák commences the piece with an orchestral introduction. The winds paint a fairly typical pastoral scene; Dvořák's genius manifests itself by echoing the horn call on the C-string of the viola. This builds to a tempestuous *ff*; the whole section sets an appropriately melancholy mood for the cantata that follows.

After the chorus, narrator, and bride quickly recount events leading up to the present, Dvořák demonstrates his masterful ensemble writing in the first duet between the Spectre and his Bride. As throughout the evening, soprano Jeanette Hall-Wood and tenor Dean Shoff demonstrated a rapport befitting the couple and Dvořák's music.

Shoff would hardly stike one as the bridegroom-turned-fiend; his main crime, his efforts to strip his bride of her Catholicism, must have been regarded as dastardly indeed by the deeply religious citizens of 19th-century Prague. Instead, Shoff came off as a gay nineties husband, cajoling, not insistent — a Benedict to his Beatrice. In *recitative* or *arioso*, the lyric tenor seemed well suited to the part and gave an undeniably fine performance: his tone was consistently clear and was the only soloist easily heard over the machinations of the orchestra.

Baritone David Arnold is a familiar face to Boston audiences, having made three appearances with the BSO. This reviewer heard his fine performance in (ironically enough) *Beatrice and Benedict* by Berlioz with the BSO last season, but his major deficiency both last season and this Sunday was a sheer lack of power. Arnold's task was not made easy by Dvořák, a composer not known for his vocal writing: his voice trapped in a mire of orchestral accompaniment, it became clear early on that he could not simultaneously articulate the words and make his voice heard while the orchestra was playing louder than *mp*. Oliver made the questionable choice of sacrificing Arnold's voice instead of the range of the orchestral dynamics, though admittedly the latter choice would still



(Photo by Joel West) have left the baritone frequently drowned out by the 120-voice chorus.

Soprano Jeanette Hall-Wood was the shrill title character. While she had the top notes, including a *b*, she had little if any control over them. Though it is an admirable achievement to drown out her "spouse" and the entire *ff* orchestra, in general she seemed poorly matched to Shoff and a role as the Spectre's Bride. In *mf* duets at the middle of her range, her singing was pleasant enough, but her lines were very rarely intelligible to the listening audience.

Large choruses are not known for their crisp diction, but Oliver's painstaking efforts in some passages was well rewarded: a *marcato* chorus of 120 voices was often more easily understood than the narrative of the baritone. In more complex textures this comprehensibility was sacrificed, but Choral Society members gave a performance that was on the whole musically satisfying and marred by no obvious flaws.

The sopranos in particular demonstrated their talents in their frequent solo entrances.

The libretto revisions made by Oliver and Donna Hewitt corrected some awkward moments in the original translation; the revised version presented in Kresge was perfectly suited to the English language, more so than most pieces written for it. The enthusiastic concertgoer is tempted to speculate: could the Choral Society re-assemble its forces at a later date, to record this unique English version for the benefit of music lovers across the country? Oliver has made quite a name for himself, both with the BSO Tanglewood Festival Chorus and on his own. The John Oliver Choral Society has recorded on New World Records; perhaps Oliver could use his influence to get *The Spectre's Bride* recorded with New World, MIT Symphony's Vox/Turnabout, or even the BSO's exclusive agent, Deutsche Grammophon.



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UROP beat

Surrealistic mathematician plays games

By Douglas H. Klapper

If surrealism is considered a forefront in the arts, then Riaz Khan '79 could be at the forefront of mathematics. He works with surreal numbers.

According to UROP personnel, Riaz is the only student in over two years to receive UROP funding for research in pure mathematics. The most popular field for student research has been Nutrition and Food Science which averages over 200 students per year. The Biology department and the Electrical Engineering and Computer Science department are second most prevalent with 100-150 students. The least

student research is conducted in Humanities, Meteorology, Economics, and Mathematics, in which fewer than 25 students normally participate each year.

Opportunities for work in pure math are understandably rare. The work is very sophisticated, and theoretical abstractions are not often in high commercial demand. Research, after all, has to be funded, and who is going to pay for work done on a subject that, if all goes well, will never really attain reality? But money, it must be remembered, is not the source of all motivation; Riaz is simply an enthusiast of the abstract.

"A number greater than zero and less than any positive fraction is called an infinitesimal," explained Riaz. "These, along with the infinite numbers and the set of real numbers, make up the system of surreal numbers."

Riaz first learned of surreal numbers in a freshman seminar. The numbers were associated with the work of John Conway, the brilliant mathematician from the University of Cambridge who is best known for his accomplish-

ments in the field of mathematical games. It was his work with these games, in fact, that led Conway to the derivation of the surreal number system.

Riaz explained Conway's work in terms of one of the more popular games that Conway uses, Heckenbush. In Heckenbush, the players are given a network of branches as shown in figure 1. The two players, left (L) and right (R), must, in turn, remove a branch with their label on it. They can remove an outside branch, or they can begin with an inside branch and remove everything that is attached above it. (Figures 1a and 1b show possible first moves for L). The player who runs out of branches first, loses.

Conway's intentions, according to Riaz, were to develop a numerical system for predicting the outcome of the games. In other words, by analyzing the branches of a Heckenbush game, taking into account many complicated factors, Conway comes up with a number. This number tells him that either left always wins, right always wins, whoever starts wins, or whoever starts loses.

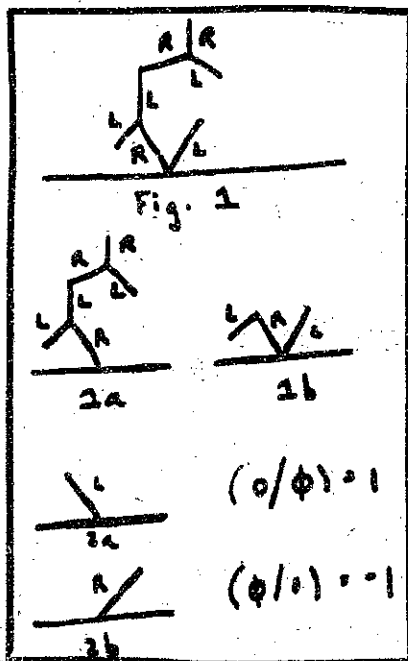
For example, figures 2a and 2b represent two simple set-ups. The set equations on the right are

Conway's surreal number system. They describe the branching network and indicate who will win (i.e. a positive number means L wins).

As can be seen, the surreal numbers are derived from a set of numbers with left and right elements; and they yield numbers between the two values. $(0/1)=4$ is a simple example. It is normally more difficult to interpret these number sets, however, as can be seen by Riaz's explanation of why $(0/\phi)$ in figure 2a, "Well, 1 is greater than 0 and less than any member of the null set, but there are no members in the null set so this system is vacuously satisfied."

The most important thing to understand about the surreal numbers is that they are derived from the rules and restrictions of the sets Conway uses to describe his games. Reducing as complicated a phenomenon as the surreal number system to a far simpler system like Conway's set representations appeals to the basic interests of science.

"The system is powerful and extremely interesting," Riaz commented, "So much comes of so little. You are basically building the real number system up from scratch."



Moon protest planned

By Alan MacRobert

Editor's note: Alan MacRobert is a member of the Real Paper.

The controversy over Rev. Sun Myung Moon and the Unification Church will heat up in Boston in the next few days, when Moon opens his seventh International Conference on the Unity of the Sciences at the Sheraton-Boston Hotel.

About 450 scientists, scholars, and theologians from more than 50 countries will attend the conference from Thursday through Sunday (Nov. 23-26). The theme of the gathering will be "The Re-evaluation of Existing Values and the Search for Absolute Values."

Every year a debate takes place in the scientific community over whether to accept Moon's money and attend his conference. Many scientists have refused to participate, arguing that to do so lends Moon respectability. Others, often those who share Moon's strong anti-communist views, attend every year.

An ad hoc coalition of students from MIT and other schools, and families of Moonies, will be protesting the conference. On Wednesday afternoon they will picket the State House from 1:30pm to 3:30, while parents, investigators, and Moon defectors hold a press conference inside. The picketers will then move to the convention site at the Sheraton Hotel in the Prudential Center. The group will also picket the Sheraton on Thursday from 4pm to 7:30, and Friday from 8:30am to 7:30pm.

Members of the group will attempt to give the scholars copies of a recent congressional report on Moon's worldwide business and political activities. The report describes Moon's science conferences as part of his "overall goal of controlling major institu-

tions in the United States and other key nations and of influencing political decisions and policies." The report also says Moon's organizations have worked closely with the Korean CIA since the 1960's. Moon has said he wants to gain a foothold in the academic world because, "Once we can control two or three universities, then we will be on the way to controlling the reins of certification for the major professions in the United States."

#6 PLAIN TALK FROM ARMCO ON FINDING A JOB:

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Too little gas or oil? Make business rebuild factories to use coal. Utility bills too high? Make business subsidize homeowners. Want cleaner air and water? Make industry install additional layers of pollution control equipment. Want less risk for people at work? Make business re-engineer every piece of equipment to remove all human responsibility. The cost of all this is enormous. Wasted money results in inflation and lost jobs.

Companies often grumble about the sock-it-to-business situation. But we do get things done when people demand them, and that's more than most institutions in this imperfect world. The fact is we are the Goose That Lays the Golden Eggs.

It's not the responsibilities themselves that worry us. It's the way in which new tasks are saddled on our backs. We're hit with deadlines. Slapped with fines. Handed detailed orders on exactly how we must try to solve each problem, by people who aren't familiar with science or engineering or finance. We're forced to spend vast sums with no recourse. Either these costs pour right on through to the prices we have to charge, or we have to eat the costs ourselves—leaving less to spend on research, better products and jobs.

What can America do about this situation? We wish our government would use more carrots and fewer sticks.

Plain talk about CARROTS AND STICKS

The power of government is just as great when it's used to pull, rather than push. Why not let government help set America's goals, and encourage each company to pick the most effective, least expensive means to reach them? That one idea could save untold billions of dollars for everybody.

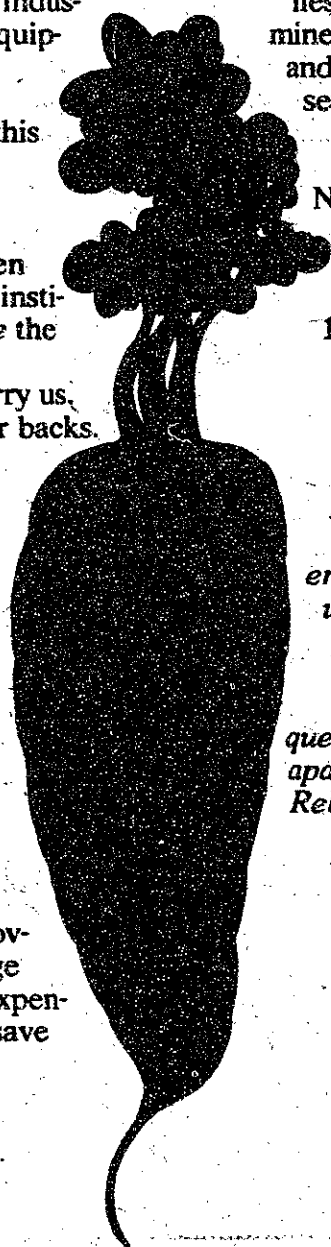
Bashing the Goose That Lays the Golden Eggs is stupid. We need more cooperation—not conflict—between business and government. Just think how much more we'd all get done if government would tap the experience and imagination of business people, not force us to focus on technicalities and procedures. Let's stop making the business system spin its wheels trying to skid through a minefield of fiendishly detailed, horribly long-winded and hopelessly obscure regulations. If America will set clear goals and provide a few carrots, business will find the ways to get things done quickly and economically.

Next time somebody says we ought to make business do something, perhaps you'd like to ask that person to think up a good carrot to use, instead of a stick. It's important to you and the 17,000,000 other Americans who'll be joining the hunt for jobs over the next ten years.

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sports cont.

Foot of the Charles



Photo essay

by

Marvin Hom



Club football changes intramural picture

By Gordon R. Haff

The addition of Club Football to MIT's collection of intercollegiate sports this year proved to be a great equalizer to the MIT intramural football program. With the football stars gone, many of them from just a few houses, the number of teams interested in playing 'A' league rose from last year's two to this year's ten. Significantly, SAE, winner of

IM football for seven out of the last eight years, lost in the semi-finals of the playoffs. SAE had lost Bruce Wrobel '79, the football club's quarterback, among others.

This year, LCA triumphed for the first time since they defeated SAE four years ago. LCA's three player loss to the football club came entirely from the line: Mike Reis '79, Art Aaron '80, and

Keith Therrien '80.

Thus, although the protection for their quarterback was poorer than in the past, they still managed to defeat SAE in the semis and win 6-2 over Kappa Sigma in the finals.

IM Volleyball also finished up its season last week. In 'A' league, the Brazilians were in first place and the Chinese Students Club (CSC) and Transportation were

second at the season's end. CSC won the tie-breaking game with Transportation before losing to the Brazilians in the semi-finals. In 'B' league, AEPi defeated an East Campus team, Heimlich Manoeuvre, in the finals, after defeating Theta Chi in the semis.

The IM Cross-Country meet was run on November 5 under sunny skies. Brian Reinhold of Meteorology finished in the front of the 183 runners (151 male, 32 female) with a time of 12:40.

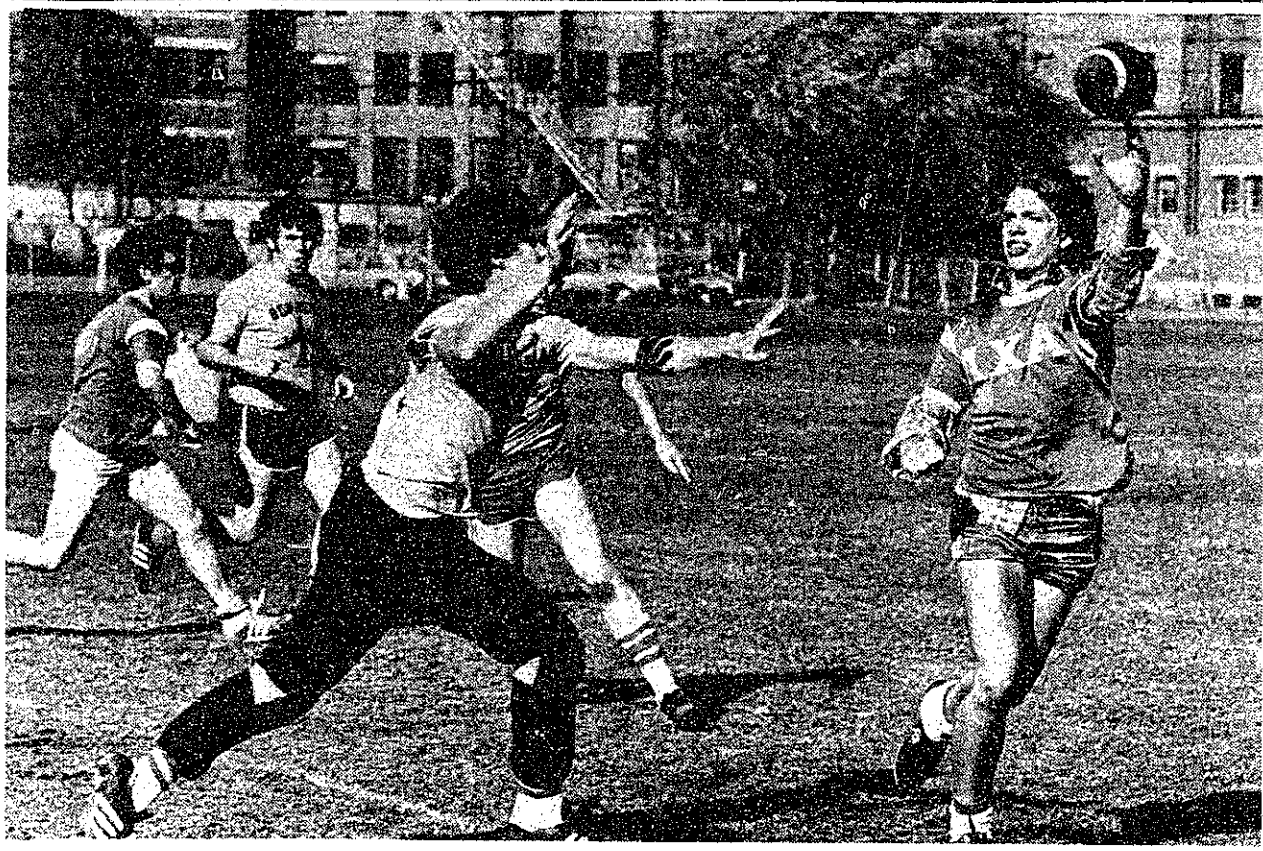
Ralph Braid of Economics came in second with a time of 12:47. In the team standings, which were figured on the basis of the times of the team's top four runners, Kappa Sigma won the living group trophy and Sloan won the independent.

score board

Saturday

Women's Fencing 10

Connecticut 6



Last Saturday, Lambda Chi Alpha ran a football marathon for the benefit of Easter Seals. Twenty-one teams, of which about two thirds showed up, were entered from MIT, Northeastern, Tufts, Simmons, and around the Boston area. In all about \$1500-2000 was raised for Easter Seals. The marathon was split into A, B, C, and coed leagues. Each team played one game and all winners received trophies. In addition, Schlitz provided two cases of beer for each winning team. There were also a variety of individual and team prizes for most money pledged. Above, Clay Struve '80 of Lambda Chi Alpha quarterbacks against the Burton Third Bombers. BTB won the game 24-0. (Photo by Gordon R. Haff)

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LET'S WORK TOGETHER TO PROTECT
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MARCH OF DIMES

IM's need more referees

By Gordon R. Haff

The Intramural Council may have solved many of its problems with managers this year, but these problems have been replaced with an equally serious one — lack of referees.

There has never been a surplus of competent referees, especially for those sports like football and soccer whose games are clustered into the daylight hours of the weekend instead of being scattered over evenings throughout the week. Indeed, about five years ago IM's encountered problems similar to those being experienced this fall. At that time an incremental pay scale for referees was introduced, replacing the old fixed hourly rate, thus providing incentive for improvement. According to Dave Michaels, the IM supervisor, this helped alleviate the problem for a while.

In 1975, the Physical Education Department sponsored a refereeing course in all major sports. In all but one case, these courses were taught by students. Michaels said, "These courses were very helpful." He added that they were useful not only in getting numbers of referees but in terms of improving quality as well. According to some preliminary figures put together by Dave Michaels and Ed Crocker, Director of Physical Education, about 25 percent of the people who took the PE courses went on to referee.

Since the PE classes had large enrollments, this figure represents a substantial number of officials. However, when the athletic budget suffered cuts, these courses were one of the first things to go.

Why have so many referee problems cropped up this year? Michaels says there are two major reasons. The first is that the number of refs has always fluctuated from year to year and that we are simply in a valley right now. His second reason is more interesting and worth delving into more deeply. He blames the coverage of sports on television and the way that it has affected the atmosphere of even casual

play. Michaels said that in IM's "Anger gets taken out on the official" and that this problem has "definitely gotten worse." The situation is even more severe when the referees are, in fact, not competent, but Michaels said that "there are highly trained people willing to ref anything but 'A' league." He does not see any easy



solution to the problem. The IM council has written letters to a few particularly "bad" 'A' league teams, but these are barely pats on the wrist. Also, the problem exists in all leagues — it is simply worse in 'A.' Michaels said that "A" and 'B' are highly competitive and want a fair game but the lower leagues have to a large degree lost sight that the major purpose is to have fun."

So what are the solutions? Michaels doesn't really see any to the referee abuse problem, since, for one thing, he's "not sure the IM Council wants to face up to this." In practical terms, Michaels "envisions a core of 50-75 referees, grad and undergrad, who could be trained through PE or Athletic Department courses."

Most of these referees would cover a variety of sports, as opposed to most of the referees presently around who do only one or two. Michaels said that the possibility of giving PE credit for refereeing has also been considered, although this has a variety of problems.

According to Ed Crocker, this spring will probably once again feature at least one PE course in refereeing. The course or courses

would probably concentrate on the sports which have had the greatest difficulty getting referees. It is of interest to note that basketball has regularly had a course in officiating over IAP and has had no serious problems with officials over the last few years. For that matter, this year 75 people turned out to the two-night officials' clinic in that sport, a turnout which Michaels called "outstanding."

Crocker said that he felt one of the major problems with IM referees right now, in addition to not having enough of them, is that many don't have enough background in officiating in general. As a result, he says "they tend to lose control a lot of the time."

Hopefully, the reinstatement of PE courses will rectify the serious problems encountered in football and soccer this year. As these seasons showed, forcing teams from the higher leagues to contribute referees is not a solution because more often than not, those officials who are only refereeing because they have to are incompetent and unreliable. The courses have the added advantage of not only getting more referees but better ones as well. If needed, incentive to take these courses might be obtained by giving higher salaries to new referees coming out of these courses than to those who aren't.

In many cases, even moderately experienced referees can learn a great deal from well-taught courses. For example, the hockey officiating class which Tom Stagliano taught last IAP, although it drew only a small number of people, many of whom were already referees, was still instructive even to those already officiating.

Finally, there is much to be said for trying to get a core of people who will ref a number of different sports. While there are surely differences between sports, at least half of officiating is universal and can be expressed in five words: "Keep the game under control."

sporting notices

The intramural wrestling tournament will be held Saturday, December 9, in the DuPont Wrestling Room. All living groups and organizations are encouraged to enter a team or teams. A brief seeding meeting will be held at 8pm Monday, December 4, at Sigma Alpha Epsilon, 484 Beacon Street, Boston. The Athletic Chairman or a representative from each team is urged to attend this meeting. Rosters are due in the IM Wrestling mailbox in the Manager's Office, room W32-131, by Wednesday, November 29, at 3:30pm.

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According to Dave Michaels, the IM supervisor, many qualified refs will officiate anything but 'A' league games. In contact sports such as football and hockey, 'A' league games can easily get out of hand. The situation is even worse when there is intense rivalry between the two teams as was the case in this Fiji/Baker-LCA championship game in conjunction with loud support from rinkside makes assignments such as these difficult to find refs for. (Photo by Gordon Haff)

Women's fencers triumph

By Amelia Phillips

On Saturday, November 18, while the rest of MIT was enjoying the unexpected sunshine and warmth, the Women's Fencing Team was busy fighting its way to victory against the University of Connecticut. The final score was 10-6, in favor of MIT.

Michelle Prettyman '79, as always, came through with her slashing coupes (cutovers). She carefully bided her time on each and picked her opponents apart.

Deep into the action of the second round, Sayuri Kuo '81 brought her delicate, but deadly, attacks into play. These penetrating maneuvers brought her second bout quickly to an end with her the victor at 5-0.

Junior Julia Shimaoka's lightning fiesche proved to be the undoing of several of her opponents. When not using that tactic, Julia moved swiftly in and out with straight attacks.

Nancy Robinson '81, victorious in three out of four bouts, went *en garde* each time with a look of determination and daring. Quick to get out of the way of the opponent's oncoming blade, Nancy systematically guided her foil to the opponent's target area.

The two substitutes Saturday afternoon were Debbi Barnes '80

and Amelia Phillips '81, each fencing one bout. Debbi fought valiantly to the bitter end, but lost 5-4. Amelia went in eagerly, but also lost.

The weekend of December 1 and 2 marks the biggest event of the season, except for the New England finals, as the team packs up and hikes down to New York City to go against three other schools.

The next event in this are will be Friday, December 8, at 7:30pm at Harvard Gym against Radcliffe.

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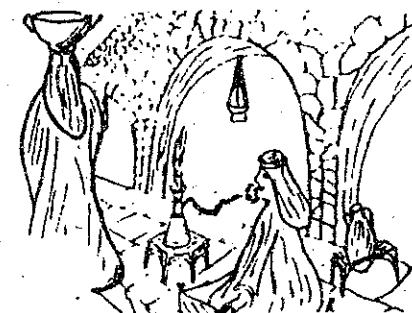
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IM Soccer Final Standings

Team	W	L	T	Pts.
A Living Group				
SAE	5	0	1	44
Fiji	4	1	1	35
LCA	3	2	1	34
Betas	3	1	1	26
Delts	2	1	3	24
Baker	1	3	2	19
AEPi	2	4	0	17
Sigma Chi	1	3	2	15
KS Bootleggers	0	5	1	8
A Independent				
Brazilians	6	0	0	50
African Students	5	1	0	45
Club Latino	2	3	1	25
Hydros	2	3	1	23
Chem E. Strikers	1	4	1	10
Chinese Students	0	4	2	7
B1				
Duke	4	0	0	34
ATO Great Guys	4	1	0	30
Fast Eddie's	2	2	1	17
Chi Phi	1	3	1	10
TEP	1	4	0	7
Pi Lambda Phi	0	2	2	5
B2				
Sig Ep B	4	0	1	38
Koreans	3	1	1	30
Mac E	2	0	3	25
Conner B	3	2	0	22
Phi Kap	0	3	2	5
New 3 Stooges	0	5	1	2
B3				
Siam	3	0	2	31
Nuclear Eng.	2	1	2	22
E.C. Strikers	1	1	3	18
TDC Spics	0	2	3	9
B4				
The Soccer Team	4	1	0	31
Phi Delt B	3	2	0	22
Theta Chi	2	2	0	15
Virjins	2	2	0	15
PKT Fences	2	2	0	15
C1				
Calorics	4	0	1	37
Russian House	2	2	1	20
Student House	2	1	1	18
PBE	1	1	2	14
Burton 5 Smokers	1	2	1	12
Fiji C	0	4	0	-1
C2				
No. 6 Club	3	0	2	31
Burton 1	1	1	3	18
PSK	1	2	1	12
PIKA	1	3	0	6
C3				
The Heads	3	0	2	29
Amherst Alley Animals	4	1	0	28
SPE C	1	2	2	15
Groat Clusters	1	3	0	6
ADP	0	3	0	0
Conner 3	0	1	0	0
C4				
F Entry Vigilantes	5	0	0	44
Chokin' Tokers	3	2	0	24
Burton 2	2	2	0	18
Hell's Angels	1	3	1	14
McCormick Widgits	1	4	0	9
East Campus	0	3	1	3
C5				
ZBT	3	0	1	31
K. Booties	3	0	2	31
AEPi C	2	3	0	16
Sick Puppies	2	2	0	16
Burton 4 Players	1	3	1	10
Franco-Prussian Warriors	1	4	0	6
C6				
Sloan	5	0	0	39
Aero-Astro	1	1	2	17
Phi Delt C	1	1	3	17
Burton 3rd Bombers	3	2	0	25
XMI Harriers	1	3	1	12
Baker Maybes	1	4	0	8
Mac C	1	2	0	7

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